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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,933	10/16/2003	John Gavin MacDonald	KCX-665 (19232)	4589
22827	7590	12/15/2008	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			SILVERMAN, ERIC E	
ART UNIT	PAPER NUMBER			
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/686,933	<b>Applicant(s)</b> MACDONALD ET AL.
	<b>Examiner</b> ERIC E. SILVERMAN	<b>Art Unit</b> 1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 November 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 31,35-45,47,48 and 50-53 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 31,35-45,47,48 and 50-53 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

Applicants' response filed 11/14/2008 was received. Claims 31, 35-45, 47, 48, and 50-53 are pending in this action.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 31, 38, and 43-47 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 40, 41, and 47-53 of copending Application No. 10/686,938 for reasons of record.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' have previously agreed that if the instant claims are otherwise allowable a terminal disclaimer will be filed over the '938 application (or any patent

issuing therefrom). Until a terminal disclaimer is filed, this provisional rejection must be maintained.

Claims 31, 43, 50 and 53 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 41-35 of copending Patent No. 7,141,518 for reasons of record.

Applicants' have previously agreed that if the instant claims are otherwise allowable a terminal disclaimer will be filed over the '518 patent. Until a terminal disclaimer is filed, this rejection must be maintained.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 31, 35-43, 47, 48, 50 and 53 remain rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 186 854 to Honda in view of US 2002/0006425 to Takaoa et al for reasons of record and those discussed below. It is noted that the previous office action contained a typographical error, and included claim 49 in this rejection instead of claim 48. Claim 49 was cancelled when the previous office action was mailed. Applicants' appear to recognize this typographical error in their response.

Claims 31, 35-45, 48 and 50-53 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of Takaoa as applied to claims 31, 35-43, 50, and 53

above and in further view of WO 03/025067 to Beaverton for reasons of record and those discussed below.

Claims 31, 35-43, 50 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of Takaoa, as applied to claims 31, 35-43, 50, and 53 above and in further view of US 5,762,643 to Ray et al.

***Response to Arguments***

Applicants' arguments have been fully considered, but are not persuasive. Applicants' arguments are directed to Honda and Takaoa, and only address the Ray and Beaverton references by asserting that they do not make up for alleged deficiencies in Honda and Takaoa. The following remarks address only the combination of Honda and Takaoa. Because Applicants' arguments are not persuasive with respect to those references, the arguments are equally unpersuasive with respect to rejections that additionally include Ray or Beaverton.

Applicants argue first that Honda and Takaoa are both directed to compositions that decompose odor compounds, whereas instant claims comprise "colloidal silica configured to adsorb one or more odorous compounds." This argument continues that because the prior art allegedly does not teach adsorption, it cannot read on the instant claims. In support of this argument, Applicants point to passages in both Honda and Takaoa that teach such decomposition. Applicants also argue that, to the extent that Takaoa can be construed to teach particles that adsorb odorous compounds, it cannot be combined with Honda. Applicants allege that this combination is forbidden because

Honda teaches that mere adsorption of odor compounds is insufficient, and that it is important to decompose such compounds.

In response, Applicants' remarks are based on the faulty premise that decomposition of odorous compounds and adsorption of such compounds are mutually exclusive. The term "adsorb" means to adhere to a surface. If a solid substrate is to decompose an odorous compound by a chemical reaction, as in Honda and Takaoa, the compound must first adsorb to the particle. Takaoa recognizes this in paragraph 119, noting that "*harmful materials adsorbed [to the silica particles] are released and at the same time decomposed*" (emphasis added). This proposition also follows from solid technical reasoning – unless an odorous compound associates with (adsorbs on) the surface of a particle, how could such a compound react with the particle to decompose, as in Honda and Takaoa? Properly understood, what Honda teaches away from is not adsorption per se, but adsorption without decomposition. Takaoa teaches colloidal silica nanoparticles of instant claims, and that they are used in compositions that both adsorb and decompose odorous compounds. Accordingly, there is no conflict between the teachings of Takaoa and Honda. Both teach the use of particles for adsorbing and decompose odorous compounds.

With respect to the argument that Takaoa does not teach particles that are "configured to adsorb one or more odorous compounds", it is noted that Takaoa's particles are identical to those disclosed in the specification for this purpose, namely SNOWTEX-AK alumina coated silica particles. It is therefore reasonable to conclude that Takaoa's particles have the same properties as instantly claimed particles, that is,

that Takaoa's particles are "configured to adsorb odorous compounds". A composition and its properties are not separable, and the salient properties of SNOWTEX-AK particles derive from the composition and structure of the particles themselves, not from the substrates to which they are applied. To the extent that Applicants still believe that Takaoa's particles are not "configured to adsorb", it is noted that because the PTO has no means to conduct analytical experiments, the burden of proof is now shifted to the Applicant to prove that Takaoa's particles are not "configured to adsorb" as per the instant claims. "[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977)." MPEP § 2112, I.

#### ***Conclusion***

No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC E. SILVERMAN whose telephone number is

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(571)272-5549. The examiner can normally be reached on Monday to Thursday 7:00 am to 5:00 pm and Friday 7:00 am to noon.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571 272 0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric E Silverman/  
Examiner, Art Unit 1618